

What is claimed is:

1. A fluid delivery nozzle for delivering fluid from a fluid delivery device to a fluid container and for communicating information regarding a fluid delivery transaction to a remote device, said fluid delivery nozzle comprising:

- 5 (a) a nozzle capable of controlling a flow of a fluid from a fluid delivery device to a fluid container;
- (b) input means provided on said nozzle for allowing information regarding the fluid delivery transaction to be inputted into said nozzle;
- 10 (c) display means provided on said nozzle for allowing information regarding said fluid delivery transaction to be displayed on said nozzle;
- (d) an information storage and retrieval device operably coupled to said nozzle;
- 15 (e) transmitting means coupled to said nozzle input means for transmitting information regarding the fluid delivery transaction; and
- (f) receiving means coupled to said display means for receiving information regarding the fluid delivery transaction.



2. The fluid delivery nozzle of claim 1, wherein said input means is a keypad.

3. The fluid delivery nozzle of claim 1, wherein said display means is a liquid crystal display.

4. The fluid delivery nozzle of claim 1, wherein the transmitting means is a radio operably coupled to the nozzle.

5. The fluid delivery nozzle of claim 1, wherein the receiving means is a radio receiver operably coupled to the nozzle.

6. The fluid delivery nozzle of claim 1, wherein said input means, said display means, said information storage and retrieval device, said transmitting means, and said receiving means are all secured to a housing which is releasably secured to said nozzle.

7. The fluid delivery nozzle of claim 1, further comprising a fluid flow meter provided on said nozzle within a stream of fluid flow.



8. A fluid delivery nozzle for delivering fluid from a fluid delivery device to a fluid container and for communicating information regarding a fluid delivery transaction to a remote device, said fluid delivery nozzle comprising:

- (a) a nozzle capable of controlling a flow of fluid from a fluid delivery device to a fluid container;
- (b) a keypad provided on said nozzle;
- (c) a display provided on said nozzle;
- (d) an information storage and retrieval device operably coupled to said nozzle;
- (e) a radio transmitter operably coupled to said input means and capable of transmitting the information regarding the fluid delivery transaction; and
- (f) a radio receiver operably coupled to the display and capable of receiving information regarding the fluid delivery transaction.

9. The fluid delivery nozzle of claim 8, wherein said keypad, said display, said information storage and retrieval device, said radio transmitter, and said radio receiver are all secured to a housing which is releasably secured to said nozzle.

10. The fluid delivery nozzle of claim 8, further comprising a fluid flow meter provided on said nozzle within a stream of fluid flow.



11. A method for handling information regarding a fluid delivery transaction and for authorizing the fluid delivery transaction, said method comprising:

- (a) providing a fluid container;
- 5 (b) providing a first information storage and retrieval device on the fluid container;
- (c) providing a fluid delivery device having a nozzle through which fluid may be dispensed;
- (d) providing a second information storage and retrieval device on  
10 the nozzle;
- (e) providing a third information storage and retrieval device at a remote location within communicative proximity with the nozzle;
- (f) inserting said nozzle into said fluid container;
- 15 (g) transmitting information from said first information storage and retrieval device to said second information storage and retrieval device;
- (h) transmitting said information received from said first information storage and retrieval device from said second  
20 information storage and retrieval device to said third information storage and retrieval device; and
- (i) providing fluid to said fluid container through said nozzle.



12. The method of claim 11, wherein said first information storage and retrieval device is a passive transponder.

13. The method of claim 11, wherein said first information storage and retrieval device is a bar code.

14. The method of claim 11, wherein said first information storage and retrieval device is an active transponder.

15. The method of claim 11, wherein said information is transmitted from said second information storage and retrieval device to said third information storage and retrieval device via radio frequency communication.

16. The method of claim 11, wherein the fluid container is provided on a vehicle and wherein the vehicle is provided with a fourth information storage and retrieval device.

17. The method of claim 16, further comprising transmitting information regarding a unique identification code from said fourth information storage and retrieval device to said third information storage and retrieval device.



18. The method of claim 17, further comprising comparing said information received from said first information storage and retrieval device with said unique identification code received from said fourth information storage and retrieval device and authorizing delivery of fluid from said nozzle only upon correlation of said unique identification code with said information received from said first information storage and retrieval device.

19. An apparatus for communication of information from a fluid delivery device to a fluid nozzle, comprising:

- (a) a fluid container;
- (b) a first information storage and retrieval device associated with said fluid container;
- (c) a second information storage and retrieval device secured to the nozzle;
- (d) a third information storage and retrieval device is wireless communicative proximity with said second information storage and retrieval device; and
- (e) means associated with said third information storage and retrieval device for transmitting via wireless communication information relative to a fluid delivery from said third information storage and retrieval device to said second information storage and retrieval device.



20. The apparatus of claim 19, wherein said information relative to said fluid delivery transaction includes information selected from the group consisting of:

- (a) diagnostics received from the said first information storage and retrieval device;
- (b) a time of a fluid delivery to said container;
- (c) a place of a previous fluid delivery;
- (d) an amount of a previous fluid delivery; and
- (e) an identification of an operator delivering a previous fluid delivery.

21. The apparatus of claim 19, wherein said transmitting means comprises:

- (i) a first antennae coupled to said third information storage and retrieval device;
- (ii) a second antenna coupled to said second information storage and retrieval device; and
- (iii) wherein said information is exchanged via signals transmitted from said first antennae and received by said second antenna.



22. The apparatus of claim 19, further comprising:

- (i) a first inductive coil communication link associated with said first information storage and retrieval device; and
- (ii) a second inductive coil communication link associated with said second information storage and retrieval device.

23. The apparatus of claim 22, further comprising security means associated with said second information storage and retrieval device for authorizing delivery of fluid to said fluid container only upon provision by said first information storage and retrieval device of an identification signal approved by said second information storage and retrieval device.

24. The apparatus of claim 23, wherein said security means is a passive transponder positioned on said fluid container for communication with said second information storage and retrieval device during said fluid delivery.

25. The apparatus of claim 23, wherein said security means permits delivery of fluid to said fluid container only when said first and said second information storage and retrieval devices are in communication via said first inductive coil communication link and said second inductive coil communication link.



26. The apparatus of claim 23, further comprising:

- (a) a fluid delivery orifice of the fluid container;
- (b) wherein said first inductive coil communication link is located adjacent said fluid delivery orifice;
- 5 (c) wherein said second inductive coil communication link is located adjacent the nozzle; and
- (d) wherein said coils are in transmitting and receiving alignment and proximity when the nozzle is inserted into said fluid delivery orifice during said fluid delivery transaction.

27. The apparatus of claim 19, further comprising means associated with said second information storage and retrieval device for displaying information relative to said fluid delivery transaction on the nozzle.

28. The apparatus of claim 27, wherein said information relative to said fluid delivery transaction includes information selected from the group consisting of diagnostics received from said first information storage and retrieval device, a time of a fluid delivery to said container, a place of a previous fluid delivery, an amount  
5 of a previous fluid delivery, and an identification of an operator delivering a previous fluid delivery.



29. The apparatus of claim 19, further comprising additional means associated with said second information storage and retrieval device for transmitting information relative to said fluid delivery transaction from the nozzle to said third information storage and retrieval device.

30. The apparatus of claim 19, further comprising means associated with the nozzle for allowing a operator to input information into said second information storage and retrieval device from the nozzle.

31. The apparatus of claim 30, wherein said operator input means is a keypad.

32. The apparatus of claim 19, further comprising a saddle pack releasably secured to the nozzle and containing said second information storage and retrieval device.

33. The apparatus of claim 19, further comprising means provided on the nozzle for authorizing a specific type of fluid to be delivered from the fluid delivery device to said fluid container.

34. The apparatus of claim 33, wherein said controlling means is a keypad provided in operable communication with said second information storage and retrieval device.



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An apparatus for wireless communication of information relative to a fluid delivery transaction from a remote location to a nozzle, comprising:

- (a) a fluid container;
- (b) a first information storage and retrieval device associated with said fluid container;
- (c) a second information storage and retrieval device associated with the nozzle;
- (d) a third information storage and retrieval device located at the remote location which is in communicative proximity with the nozzle;
- (e) first means associated with said first information storage and retrieval device for communicating via wireless communication with said second information storage and retrieval device;
- (f) second means associated with said second information storage and retrieval device for communicating via wireless communication with said first information storage and retrieval device;
- (g) third means associated with said second information storage and retrieval device for communicating via wireless communication with said third information storage and retrieval device;
- (h) fourth means associated with said third information storage and retrieval device for communicating via wireless communication with said second information storage and retrieval device;



- (i) security means associated with said second information storage and retrieval device for authorizing a fluid delivery from the nozzle to said fluid container, only upon provision by said first information storage and retrieval device of an identification signal approved by said second information and retrieval device;
- (j) means associated with said second information storage and retrieval device for displaying information relative to a fluid delivery transaction on the nozzle; and
- (k) means associated with the nozzle for allowing a operator to input information into said second information storage and retrieval device from the nozzle.

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~~36~~. The apparatus of claim <sup>11</sup>~~35~~, wherein said transmitting means comprises:

- (i) a first antennae coupled to said third information storage and retrieval device;
- (ii) a second antenna coupled to said second information storage and retrieval device; and
- (iii) wherein said information is exchanged via signals transmitted from said first antennae and received by said second antenna.



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~~37~~. The apparatus of claim ~~35~~<sup>11</sup>, wherein said means associated with the nozzle for displaying information relative to said fluid delivery transaction on the nozzle is a liquid crystal display.

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~~38~~. The apparatus of claim ~~35~~<sup>11</sup>, wherein said means associated with the nozzle for allowing a operator to input information into said second information storage and retrieval device from the nozzle is a keypad.

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~~39~~. The apparatus of claim ~~35~~<sup>11</sup>, wherein said transmitting means comprises:

(a) a first inductive coil communication link associated with said fluid container; and

5 (b) a second inductive coil communication link associated with the nozzle.



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The apparatus of claim 39, further comprising:

- (a) a fluid delivery orifice of said fluid container;
- (b) wherein said first inductive coil communication link is located adjacent said fluid delivery orifice;
- 5 (c) wherein said second inductive coil communication link is located adjacent the nozzle; and
- (d) wherein said coils are in transmitting and receiving alignment and proximity when the nozzle is inserted into said fluid delivery orifice during said fluid delivery transaction.

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The apparatus of claim 36, wherein said security means is a passive transponder positioned on said fluid container for communication with said second information storage and retrieval device during said fluid delivery.

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